

WHAT IS CLAIMED IS:

1. A method of designing a golf club head, comprising the steps of:

using a golf club head model and a golf ball model both of which are composed of a plurality of finite elements;

impacting said golf club head model against said golf ball model at a speed falling in a range of speeds generated when an ordinary golfer hits a golf ball; and measuring a time period T2 in which a face of said golf club head model is in contact with said golf ball model at an impact time and a time period T1 from a time of contact between said golf club head model and said golf ball model until a time when a vertical force acting on said face of said golf club head model takes a peak value; and

altering a specification of said golf club head model such as a thickness and a material thereof or/and a configuration thereof to set a ratio of said time period T2 to said time period T1 high and increase a frictional force acting in a direction in which a backspin of said golf ball model decreases and a period of time in which said frictional force acts to thereby decrease a backspin amount and increase a hitting angle.

2. The method according to claim 1, wherein said golf ball model is hit at a speed of 20m/second to 60m/second with an iron golf club head model; and at a speed of 40m/second with a wood golf club head model.

3. The method according to claim 1, a ratio of said time

period T2 to said time period T1 ( $T2/T1$ ) is not more than 2.2.

4. The method according to claim 2, a ratio of said time period T2 to said time period T1 ( $T2/T1$ ) is not more than 2.2.

5. A golf club head whose thickness is thin entirely or partly or/and whose face is made of a soft material, so that when a golf ball is hit with said golf club head at a speed falling in a range of speeds generated when an ordinary golfer hits said golf ball, a ratio of a time period T2 in which said face of said golf club head is in contact with said golf ball to a time period T1 from a time of contact between said golf club head and said golf ball until a time when a vertical force acting on said face of said golf club head takes a peak value is not less than 1.9 nor more than 2.2.

6. The golf club head according to claim 4, wherein a metal plate to be disposed on a face of a wood golf club head has a thickness of 1.5 to 2.7mm and a modulus of elasticity of 1000 to 21000 kgf/mm<sup>2</sup>; and a metal plate to be disposed on a face of an iron golf club head has a thickness of 1.5 to 2.5mm and a modulus of elasticity of 800 to 21000 kgf/mm<sup>2</sup>.

7. The golf club head according to claim 4, designed by using a method of designing a golf club head according to claim 1.

8. The golf club head according to claim 5, designed by using a method of designing a golf club head according to claim 1.